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A Comparison between the Feeding Practices of Parents and Grandparents.

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A Comparison between the Feeding Practices of Parents and Grandparents.

Abstract

Grandparents play a valuable role in the socialisation of young children, and as many as 36% of British parents use grandparents as their main form of childcare. Research has begun to explore how grandparents impact the social and cognitive development of children, but very little research has evaluated their contribution to child feeding. The present study explores whether there are differences between parents and grandparents in terms of their feeding practices, and whether grandparents' feeding practices are related to the number of hours that they spend caring for grandchildren. Results indicate that grandparents reported using significantly more maladaptive feeding practices such as using food to regulate emotions and restricting food, but more positive practices such as providing a healthy food environment. The more hours that grandparents spent caring for children the more their feeding practices resembled those broadly reported by parents. Results suggest that grandparents can have a measurable impact on child feeding behaviour which in turn is likely to predict the eating behaviours of their grandchildren.

Keywords: grandparent, parenting styles; child feeding, informal caregiving

Highlights

- Grandparents reported providing a healthier nutritional environment than parents
- Grandparents reported using food to regulate child emotions more than parents
- Grandparents reported restricting child food intake more than parents
- The longer grandparents spent with children, the more feeding resembled parents

1. Introduction

In 2010, 66.5% of mothers were engaged in some level of employment, and with this there has been an increasing call on grandparents to assist with 'informal' childcare (Wellard, 2011). Approximately 36% of British parents use grandparents for their main childcare (Rutter & Evans, 2011) and in a recent survey 1 in 5 grandmothers provided over 10 hours of care for grandchildren each week (Wellard, 2011). The benefits of this care can be seen through the impact upon grandparents themselves as well as in terms of outcomes for the child.

Many grandparent carers are actively involved in their grandchild's learning; including meeting teachers, cooking and reading (Rutter & Evans, 2011). Grandparent involvement in child schooling and education has been associated with lower levels of child anti-social behaviour (Buchanan & Griggs, 2009) and children informally cared for by grandparents are said to have enhanced vocabularies (Grandparents Plus, 2011). However, other research suggests that children cared for by grandparents as an alternative to nursery are less school ready (Grandparents Plus, 2011). Research is beginning to explore how grandparents manage and perceive their role as carers (Rutter & Evans, 2011), with both positive and negative effects being found. For example, grandparent-grandchild closeness has been shown to predict superior grandmother mental health (Goodman, 2012), but assuming full-time custodial care for grandchildren has been linked to elevated grandparent stress and ill-health (Edwards, 2001). Detrimental associations such as this are often reported where grandparents have formal full-time care of grandchildren because of ill parent physical or mental health, adding complexity to the relationships with grandparent and child well-being.

In cases of informal grandparent care, there has been a distinct lack of research evaluating the role of grandparenting around child feeding or nutrition. The practices that parents use when feeding children can have a measurable impact upon eating and weight (Powell et al., 2011; Farrow & Blissett, 2006). For example overly controlling feeding practices which over-ride children's own signals of hunger and satiety have been shown to be counterproductive in terms of facilitating a healthy relationship with food and eating and may often backfire and predict less unhealthy food preferences in children (Mitchell, Farrow & Haycraft, 2013). More specifically parental pressure to eat has been shown to predict more picky eating and food refusal (Galloway et al., 2005) and force feeding from an authority figure predicts food refusal even in adulthood (Batsell, Brown, Ansfield, & Paschall, 2002). Whilst parents overtly restricting foods has been shown to predict increased consumption of such foods when they are freely available (e.g., Ventura & Birch, 2008), using food as a reward has been shown to increase the affective value of such food and may predict eating to excess (Baughcum, Burklow, Deeks, Powers, & Whitaker, 1998). Maternal use of food as an emotional tool has also been experimentally linked to eating in the absence of hunger (Blissett, Haycraft, & Farrow, 2010). There has been much less research on the positive effects of practices which facilitate a healthy food environment such as modelling healthy food intake, getting the child involved in mealtimes and cooking and teaching them about nutrition, but research does suggest that parental use of these practices may be associated with less child fussiness with food and less emotional eating (Powell, Farrow & Meyer, 2011). The role of grandparents within this context of feeding practices has yet to be evaluated. Given that children carry eating behaviours into adulthood (Brunstrom et al., 2005), and as many as 36% of British children are being regularly fed by their grandparents (Rutter & Evans, 2011), it is imperative to explore the role that grandparents may have in shaping young children's eating.

Recent qualitative research has begun to explore how grandparents influence child eating behaviours in Chinese three-generation families (Jingxiong et al., 2007). The results indicated that grandparents played an important role in planning and cooking family meals, and that their attitudes influenced their grandchild's nutrition and eating habits. The authors also reported that Chinese grandparents often use food as an emotional tool to express love and care, and encourage children to consume larger portion sizes than is necessary (Jingxiong et al., 2006). UK based research

has also found that pre-school children from advantaged backgrounds were significantly more likely to be overweight if cared for by grandparents (Pearce et al., 2010). Whilst American research suggests that grandparents may sacrifice their own fruit and vegetable intake to provide for their grandchildren (Speirs et al., 2009), indicating a negative impact on their own health. However beyond this there has been little research to date on this important topic. In the research to date, culture is likely to have a strong impact both on the nature of grandparents feeding practices and styles, as well as on how influential these practices are. For example in cultures where there is greater respect for elders wisdom, or where grandparents are more involved in childcare, it might be expected that grandparents feeding styles are adopted more by parents and are in turn more influential to the child. Moreover, the direction and strength of these relationships is likely to be influenced by the amount of time children spend in care with grandparents in comparison to parents or formal childcare, and is also likely to depend by a number of individual characteristics (Blissett, 2011; Blissett & Haycraft, 2008; Hubbs-Tait et al., 2008).

The current study begins to quantitatively evaluate the contribution of informal grandparent care to the feeding practices of young children in an English sample. It explores whether parents and grandparents differ in terms of the feeding practices that they use with children and assesses whether the amount of time that grandparents spend caring for children is related to feeding practices. Based on previous findings with grandparents (Jingxiong et al., 2006) it was hypothesised that they would use food more for emotion regulation, as a reward and pressure to eat compared to parents. Given the links between grandparent care and child BMI (Pearce et al., 2010), it was hypothesised that parents would encourage energy balance and variety, teach about nutrition, provide a healthy eating environment and encourage child involvement with food more than grandparents. Given that grandparents typically spend less time with children around food compared to parents it was hypothesised that they would report less modelling and monitoring of child food intake, less restriction of food and allow the child more control. It was also hypothesised that the more time grandparents spend caring for grandchildren, the more their feeding practices would resemble those of parents.

2. Method

2.1 Participants

One hundred participants were recruited: 50 parents and 50 grandparents of children aged 2 - 8 years (47 male and 53 female children; mean age = 4 years; SD=1.69). Participants were derived from two distinct and unrelated groups: parents and grandparents. The parent population comprised of 49 mothers and 1 father, whilst the grandparent population comprised of 39 grandmothers and 11 grandfathers. They were recruited through questionnaire packs distributed through schools, nurseries, and at child play areas in the East Midlands area of England, UK. Approximately 150 questionnaire packs were distributed to potential participants with pre-paid envelopes for them to return questionnaires to the researcher in if they consented to take part, yielding a response rate of approximately 66%. Parents were on average aged 33 (SD= 6.89, range= 21-47 years), and grandparents were on average aged 55 (SD= 5.36, range= 44-65 years). Participants were primarily White British (90% of parents; 96% of grandparents), and reported an average of 3.3 and 1.9 years of education post 16 years respectively. Due to the differences identified in the literature between informal and formal full-time grandparenting, we aimed to recruit only informal caregiving grandparents (i.e. without full custodial care). Grandparents reported caring for their grandchild on average for 14.24 hours each week (SD= 8.65, range= 3-39). Ethical clearance for this research was given by Loughborough University Ethical Advisory Committee and all participants gave informed written consent.

2.2. Measures. Participants completed:

2.2.1. The Comprehensive Feeding Practices Questionnaire (CFPQ; Musher-Eizenham & Holub, 2007). A 49 item questionnaire which measures 12 different feeding practices: child control during mealtimes or food choice, use of food for emotion regulation, encouragement of energy balance and variety, provision of a healthy eating environment, use of food as a reward, encouragement of child involvement during mealtimes and food preparation, modelling of eating behaviour, monitoring child food intake, pressure to eat, restriction of food for health and weight reasons and teaching about nutrition. The CFPQ has been shown to be valid and reliable with parents (Melbye et al., 2011; Musher-Eizenham & Holub, 2007) and the internal consistency and validity of subscales have previously been demonstrated with samples of mothers using factor analyses and Cronbach's alphas (ranging from .58-.81: Musher-Eizenman & Holub, 2007). This measure has not previously been used with grandparents and instructions were reworded for grandparents to ask them to focus on their grandchild. The internal consistency of the subscales with the sample of grandparents was assessed, alphas were as follows: child control (.76); food for emotion regulation (.90), encouragement of energy balance and variety (.62), healthy eating environment (.49), food as a reward (.69), child involvement during mealtimes (.50); modelling (.60); monitoring (.83); pressure (.42); restriction for health (.53); restriction for weight (.75) and teaching about nutrition (.31). All alphas were deemed good or acceptable with grandparents with the exception of teaching about nutrition, pressure and environment. Results based on these subscales are therefore treated with caution.

3. Results

Descriptive statistics are presented in Table 1.

Table 1 Mann-Whitney test of differences between parents and grandparents on child feeding

	<i>Parent Mean (SD)</i>	<i>Grandparent Mean(SD)</i>	<i>Mann- Whitney (U)</i>
<i>CFPQ Scales</i>			
<i>Child control</i>	2.32 (0.54)	3.08 (0.87)	591.00**
<i>Emotion regulation</i>	1.76 (0.66)	2.51 (1.13)	775.50**
<i>Encourage balance</i>	4.42 (0.46)	3.93 (0.68)	711.00**
<i>Environment</i>	3.37 (0.69)	3.74 (0.71)	901.00**
<i>Food as reward</i>	3.11 (0.99)	3.25 (1.01)	1117.00
<i>Involvement</i>	3.36 (0.89)	3.50 (0.86)	1123.50
<i>Modelling</i>	3.94 (0.81)	3.49 (0.81)	860.50**
<i>Monitoring</i>	3.72 (0.87)	3.71 (0.88)	1226.50
<i>Pressure</i>	3.23 (0.85)	3.33 (0.78)	1161.50
<i>Restriction for health</i>	3.46 (0.79)	3.36 (0.86)	1174.50
<i>Restriction for weight</i>	2.35 (0.64)	3.02 (0.86)	689.50**
<i>Teaching nutrition</i>	3.36 (0.83)	3.49 (0.82)	1123.50

*p < .05, **p < .01 (one-tailed)

Mean scores are similar to those reported previously (Musher-Eizenman & Holub 2007; Winsler et al., 2005). The data were primarily non-normal therefore non-parametric statistics were used. All analyses were 1-tailed due to the directional nature of the hypotheses. Mann-Whitney tests indicate that grandparents reported allowing children significantly more control and input into mealtimes and food choice and providing a significantly more positive and healthy food environment. However, grandparents also reported that they used food to regulate emotions significantly more often, encouraged energy balance and variety with food less, modelled healthy eating less, and used restriction of food for weight concern significantly more than parents.

Spearman's correlations indicated that grandparents who spent more time caring for their grandchildren reported significantly more provision of a positive food and eating environment, more teaching grandchildren about nutrition, more use of food as a reward, and more modelling of healthy food intake, they also reported allowing grandchildren significantly less control into mealtime and food decisions (Table 2).

Table 2

Spearman's rho correlations between the number of hours a grandparent spends with their grandchild with their feeding practices.

	<i>No. of hours</i>
<i>CFPQ Subscales</i>	
<i>Child control</i>	-.29*
<i>Emotion regulation</i>	-.18
<i>Encourage balance</i>	.16
<i>Environment</i>	.32*
<i>Food as reward</i>	.24*
<i>Involvement</i>	.03
<i>Modelling</i>	.29*
<i>Monitoring</i>	.02
<i>Pressure</i>	-.00
<i>Restriction for health</i>	.18
<i>Restriction for weight</i>	.00
<i>Teaching nutrition</i>	.35**

* $p < .05$, ** $p < .01$ (one-tailed)

4. Discussion

The findings indicate that, compared to parents, grandparents may provide a healthier nutritional environment for children whilst also using more maladaptive practices when feeding. Specifically, grandparents reported using more use of food for emotion regulation, less encouragement of energy balance and variety, less modelling healthy eating and used more restriction of food for weight reasons. These feeding practices have been shown to have negative effects on

child eating behaviour, with the use of food for emotion regulation predicting more emotional eating (Blissett et al., 2010) and restrictive feeding predicting disinhibited eating and weight gain over time (Carper et al., 2000; Clark et al., 2007). At the same time, grandparents reported providing a more healthy food environment; keeping more healthy foods in the home and less unhealthy cakes, sweets and ice-cream. It may be that parents are more likely to have foods such as this in their homes as they are often marketed at children (Cairns et al., 2013). This is an encouraging finding suggesting that grandparents have the potential to model healthy food intake given that such foods are more often brought by them. Grandparents also reported allowing children significantly more control in terms of eating and snacking, and choosing foods to eat, which have been suggested to be positively associated with healthy child eating behaviour (Powell et al., 2011).

The more time that grandparents spent informally caring for grandchildren, the more they reported greater provision of a positive food and eating environment, more teaching about nutrition, more modelling healthy food intake and less allowance of child control around mealtimes. These findings suggest that the more time grandparents spend caring for their grandchildren the more directed they are to providing, teaching and modelling behaviour to encourage healthy eating. They were also more likely to use food as a reward, which, although an unhealthy practice, is a behaviour commonly reported by parents (Cooke et al., 2011). These findings may reflect the fact that grandparents who care for their children relatively infrequently adopt a more indulgent and stereotypical grandparent feeding role, whilst those who are engaged in regular structured care for their grandchildren develop a more parental role. Whilst it is clearly beneficial to child health for grandparents to take on these adaptive and healthy feeding behaviours, particularly if parents are working long hours and have less time to teach about or model healthy eating, what is as yet unclear is how difficult it is for grandparents to manage conflicting roles as a grandparent, perhaps wanting to spoil their grandchildren but also be a parental figure (Emick & Hayslip, 1999). We do not yet know whether having an indulgent grandparent who uses maladaptive feeding practices occasionally is detrimental to child health, or whether children remain uninfluenced by infrequent inconsistencies in feeding. Research is needed to understand how children interpret and respond to different feeding practices from different caregivers.

The findings of this small scale exploratory study should be interpreted tentatively and without generalisation given the limited social and demographic makeup of the population. Moreover, some of the subscales on the CFPQ (specifically environment, pressure to eat and teaching about nutrition) demonstrated poor internal consistency; these measures may require further adaptation to a grandparent population and the data from these should be treated tentatively. However, these findings begin to provide greater insight into the role that grandparents play with regards to early child eating and nutrition. Policies focussing on improving child diet and eating should consider the often overlooked contribution of grandparents, and future research should consider the impact of grandparenting on child nutrition in clinical samples of children who are over or undernourished.

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